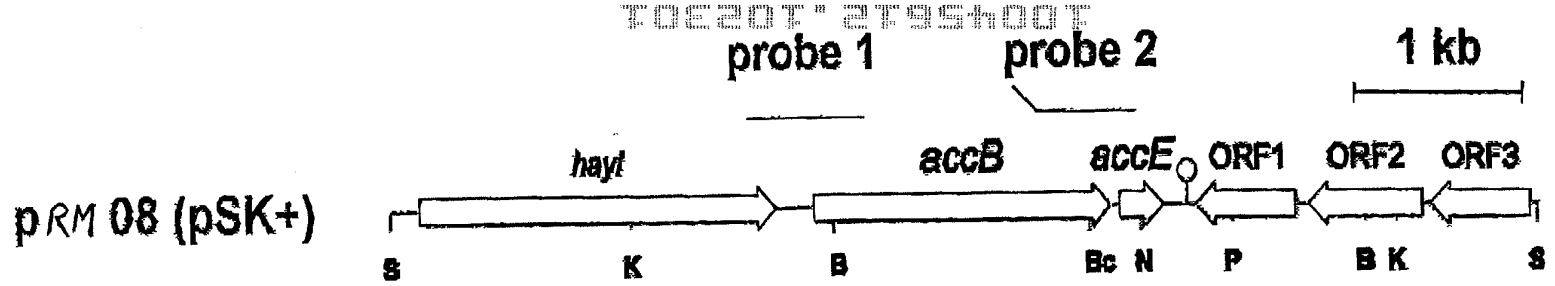
A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probe 2
1 kb
pRM 08 (pSK+)
hayI
accB
accE
ORF1
ORF2
ORF3
S
K
B
Bc
N
P
B
K
S

B

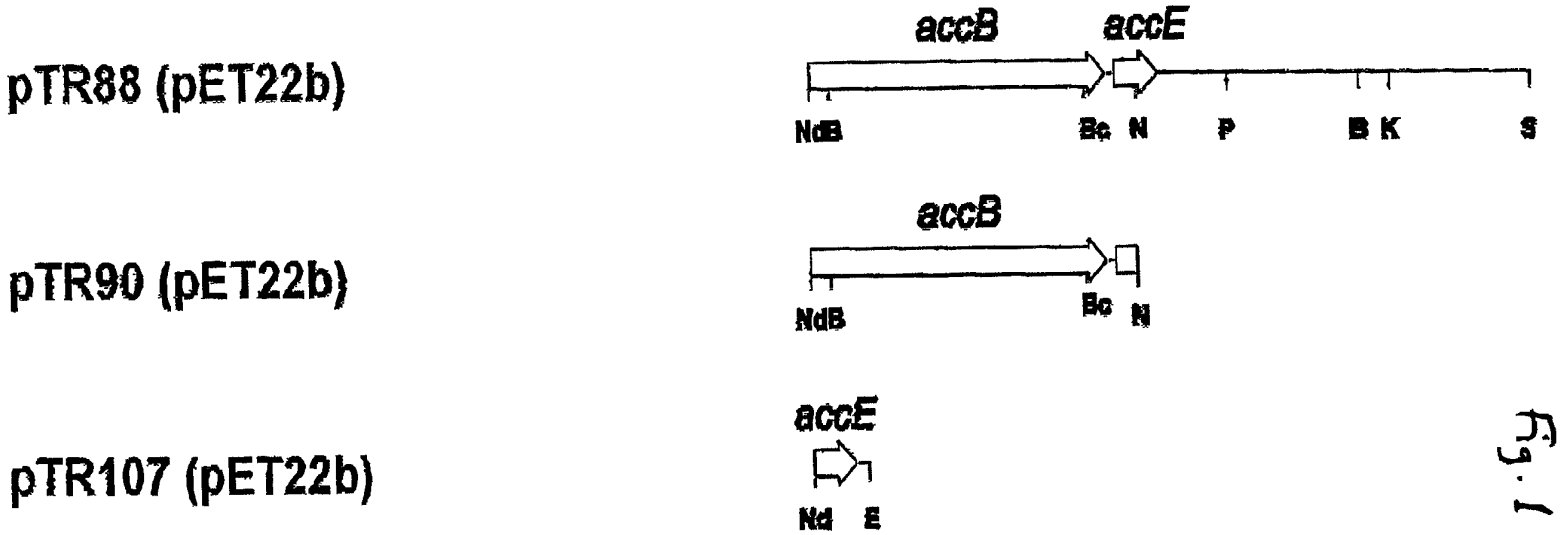
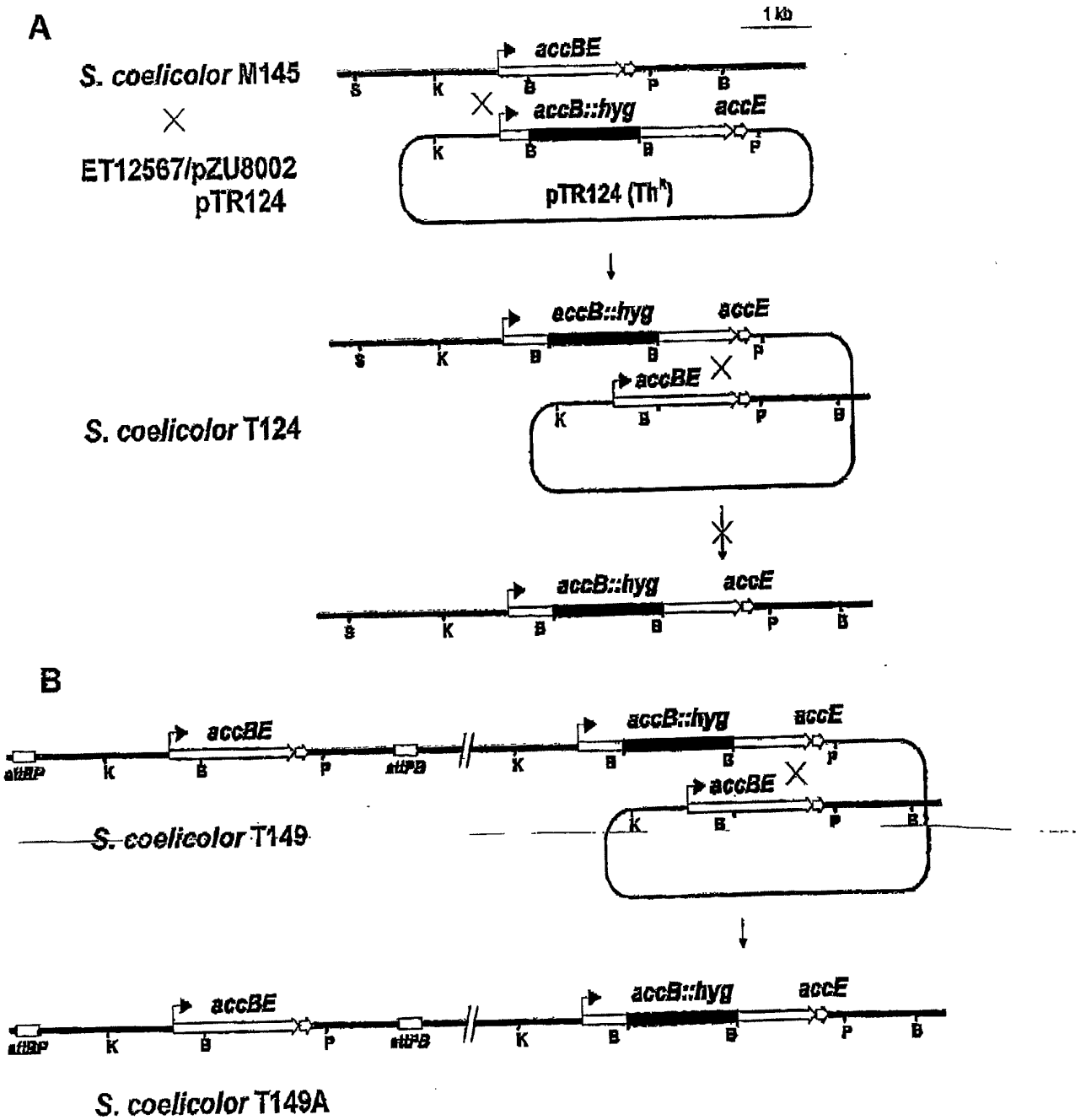
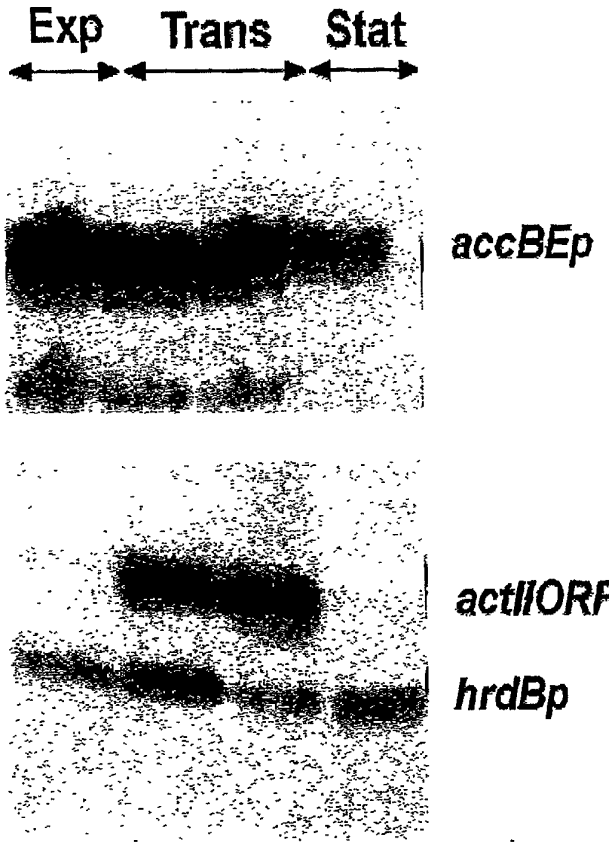

pTR88 (pET22b)
accB
accE
NdB
Bc
N
P
B
K
S
pTR90 (pET22b)
accB
NdB
Bc
N
pTR107 (pET22b)
accE
Nd
E

Fig. 1

Fig. 2



A


Exp
Trans
Stat
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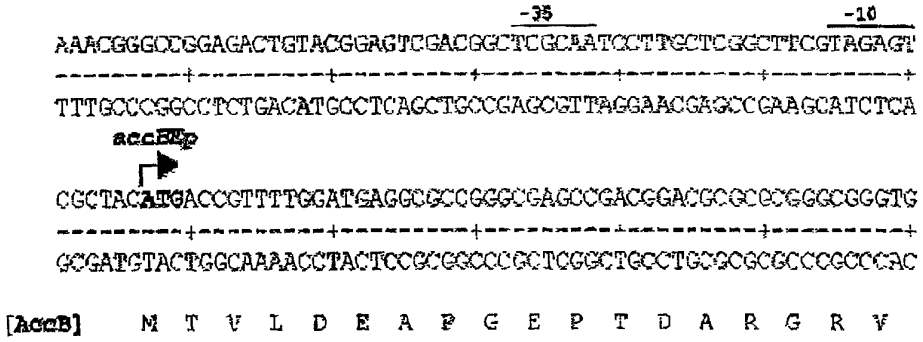
actIIORF4p
hrdBp

B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-10
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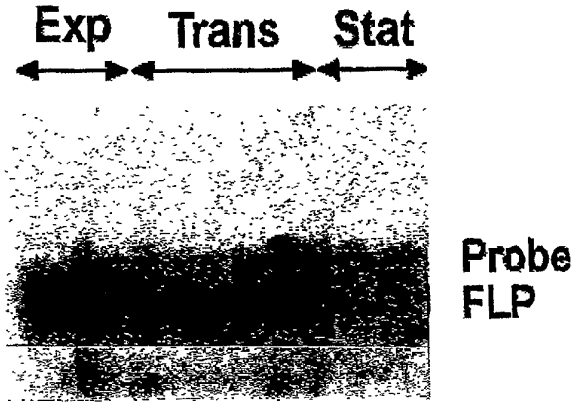
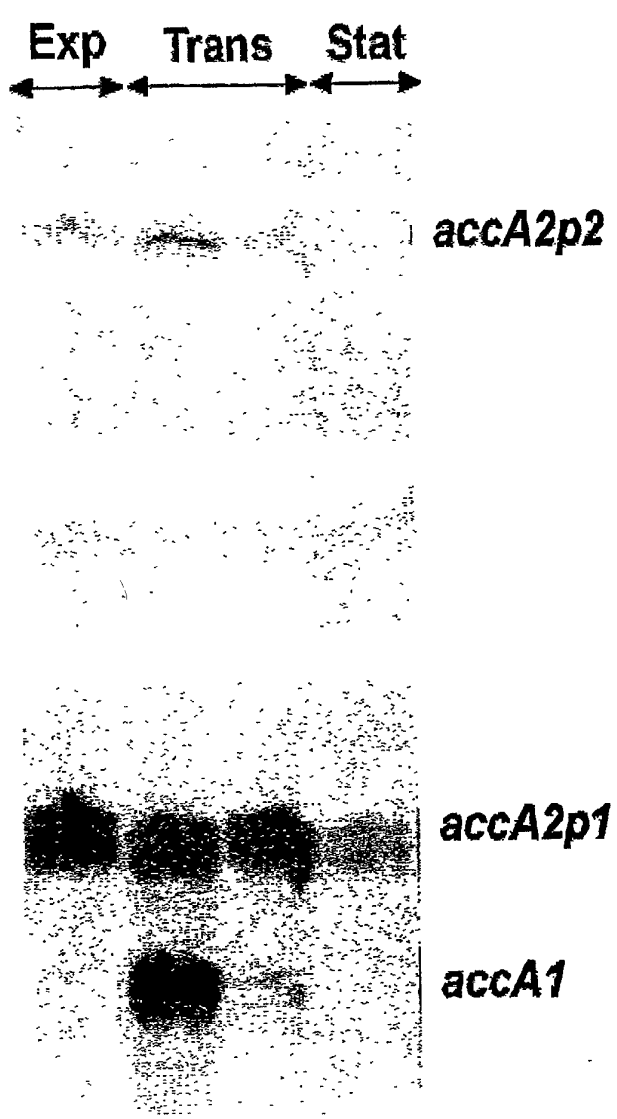
accBEp
CGCTACATGACCGTTTTGGATGAGGCGCCGGGCGAGCCGACGGACGCGCCGGGCGGGTG
GCGATGTACTGGCAAAACCTACTCCGCGGCCCGCTCGGCTGCCTGCGCGCGCCCGCCCAC
[AccB] M T V L D E A P G E P T D A R G R V

Fig. 3

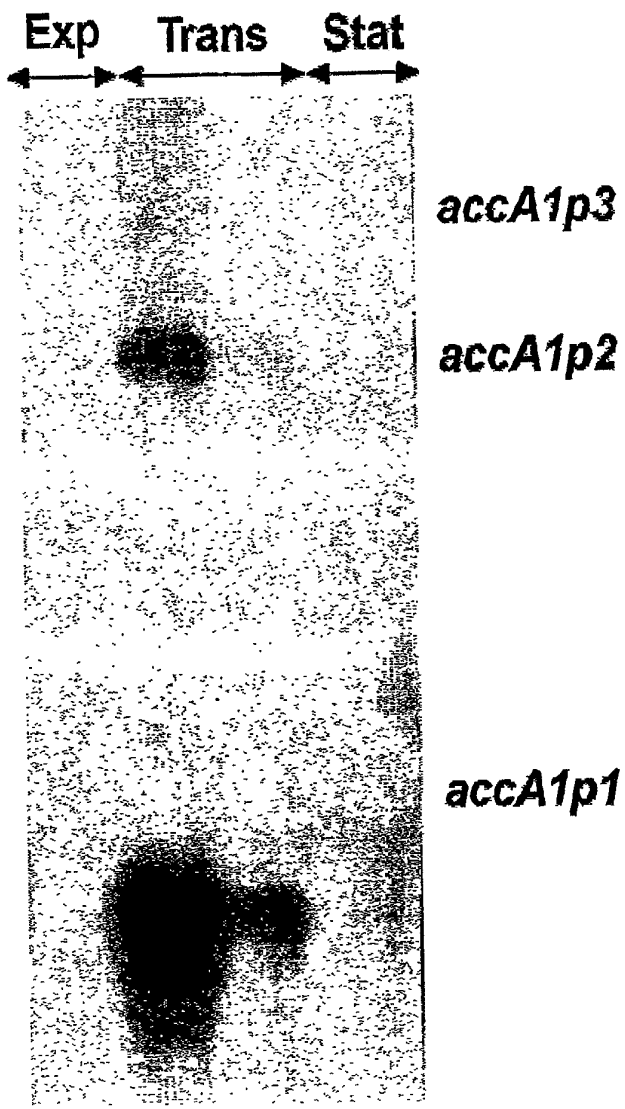
C


Exp
Trans
Stat
Probe
FLP

A


Exp
Trans
Stat
accA2p2
accA2p1
accA1

B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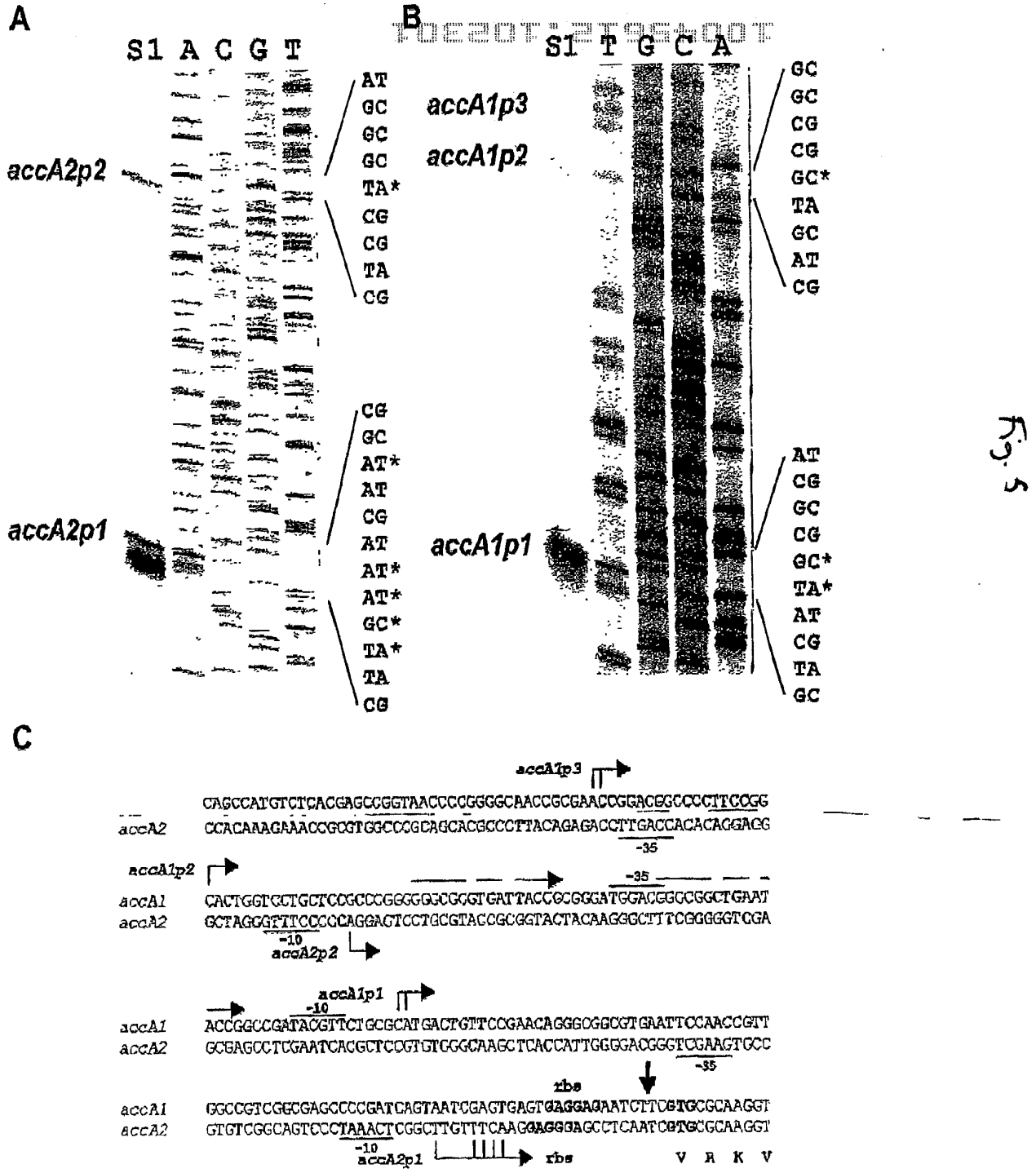
Trans
Stat
accA1p3
accA1p2
accA1p1

Fig. 4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S1 A C G T
accA2p2
accA2p1
AT
GC
GC
GC
TA*
CG
CG
TA
CG
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GC
AT*
AT
CG
AT
AT*
AT*
GC*
TA*
TA
CG
B
S1 T G C A
accA1p3
accA1p2
accA1p1
GC
GC
CG
CG
GC*
TA
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CG
GC*
TA*
AT
CG
TA
GC
C
accA1p3
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accA2 CCACAAAGAAACCGGGTGGCCCGCAGCACGCCCTTACAGAGACCTTGACCACACAGGACG
-35
accA1p2
-35
accA1 CACTGGTCCTGCTCCGCCCGGGGGGCGGGTGATTACCGCGGGATGGACGGCGGCTGAAT
accA2 GCTAGGGTTTCCCCCAGGAGTCCTGCGTACCGCGGTACTACAAGGGCTTTCGGGGGTCGA
-10
accA2p2
accA1p1
-10
accA1 ACCGGCCGATACGTTCTGCGCATGACTGTTCCGAACAGGGCGGCGTGAATTCCAACCGTT
accA2 GCGAGCCTCGAATCACGCTCCGTGTGGGCAAGCTCACCATTGGGGACGGGTCGAAGTGCC
-35
rbs
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accA2 GTGTCGGCAGTCCCTAAACTCGGCTTGTTTCAAGGAGGGAGCCTCAATCGTGCGCAAGGT
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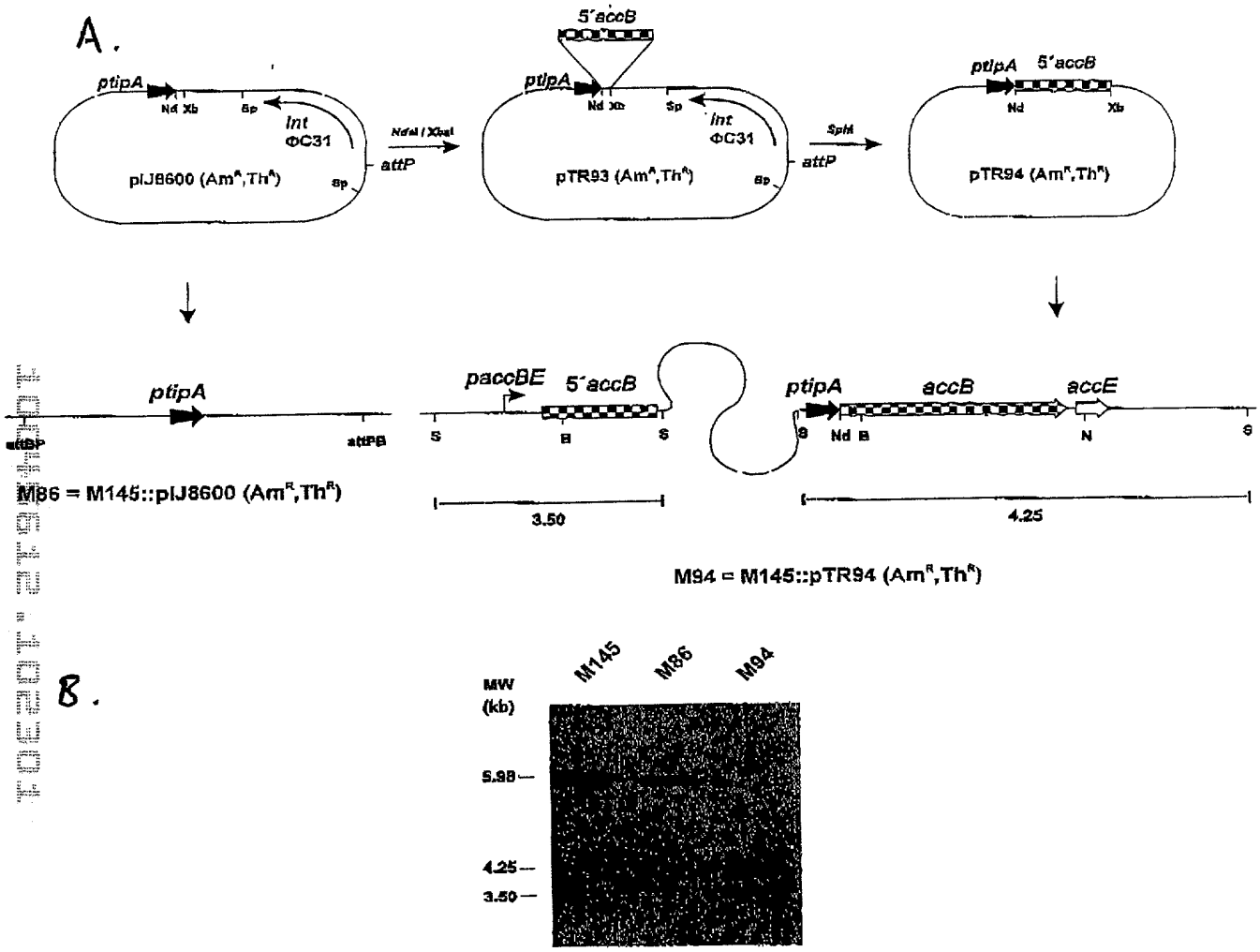
accA2p1
rbs
V R K V

Fig. 5

Fig. 6

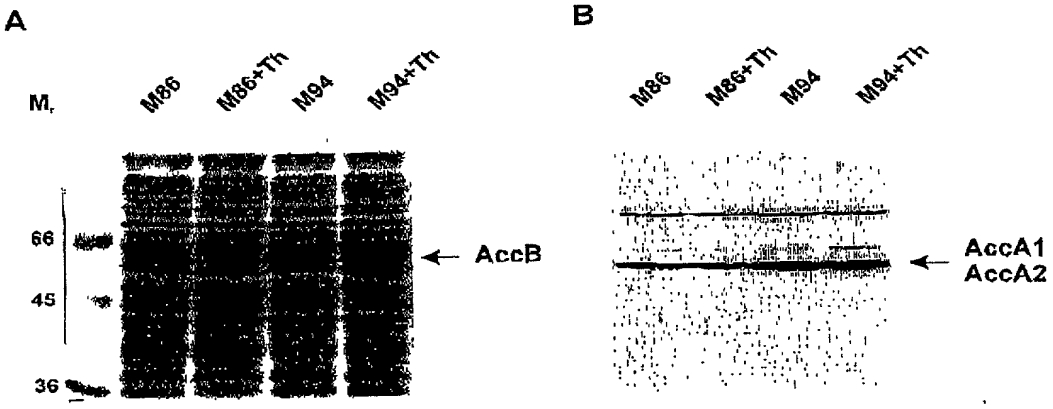


Construction and analysis of the *accBE* conditional mutant

A. Diagram showing the integration of pIJ8600 in strain M86 and the expected organization of the Campbell integration of pTR94 in M94. Restriction sites: B, *Bam*HI;N, *Not*I; Nd, *Nde*I; S, *Sac*I; Sp, *Sph*I; Xb, *Xba*I.

B. Hybridization analysis of Southern blot of *Sac*I-digested DNAs from M145, M86 and M94. The probe was the internal *Nde*I-*Xba*I fragment of *accB* showed in A.

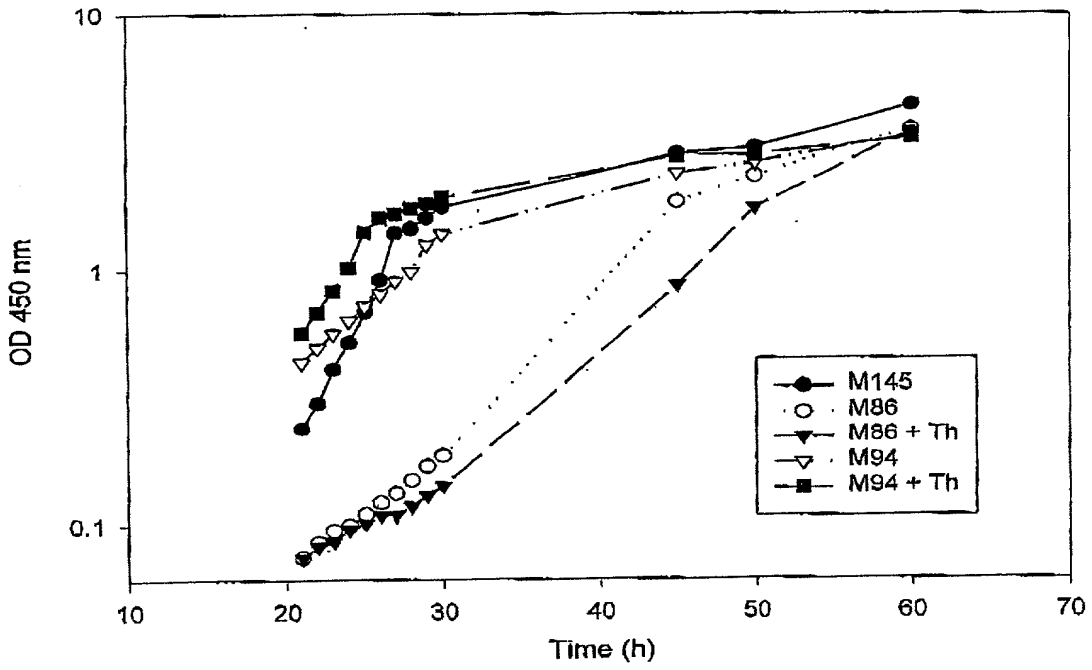
Fig. 7



Expression of the acyl-CoA components in M86 and M94

A. SDS-PAGE of cell-free extracts of *S. coelicolor* M86 and M94 strains grown in YEME medium containing 10 μg ml^{-1} Am with or without the addition of 5 μg ml^{-1} Th. B. A duplicate of the SDS-PAGE gel showed in A was subjected to Western blotting and stained for biotinylated proteins by using alkaline phophatase-streptavidin conjugate.

Fig. 8A



Growth curves of M145, M86 and M94 strains.

10^8 spores of strains M86 and M94 were inoculated in YEME medium containing 10 µg of Am or 10 µg ml^{-1} Am and 5 µg ml^{-1} of Th. 10^8 spores of M145 were inoculated in YEME. The growth was followed by measuring $OD_{450\ nm}$.

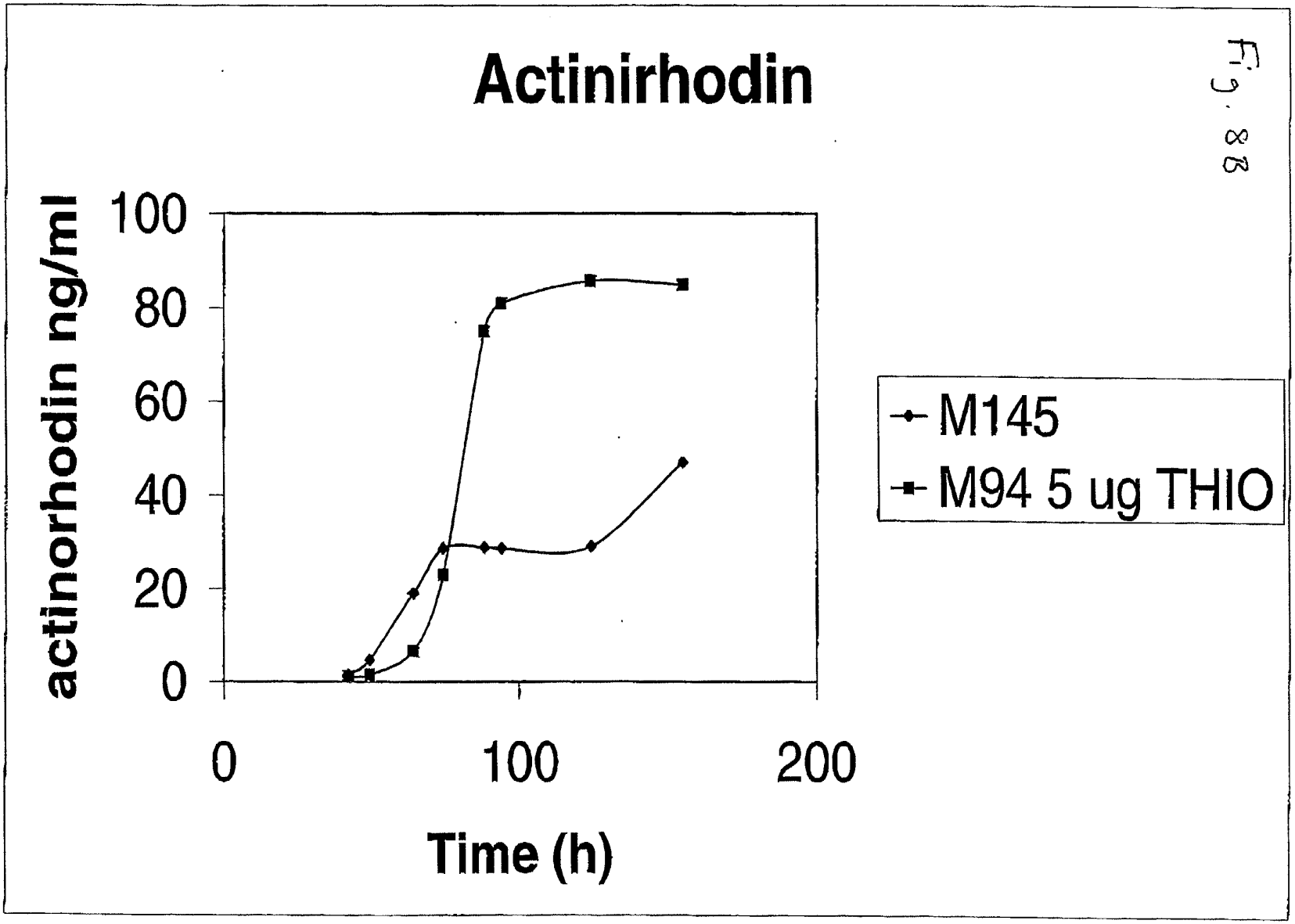
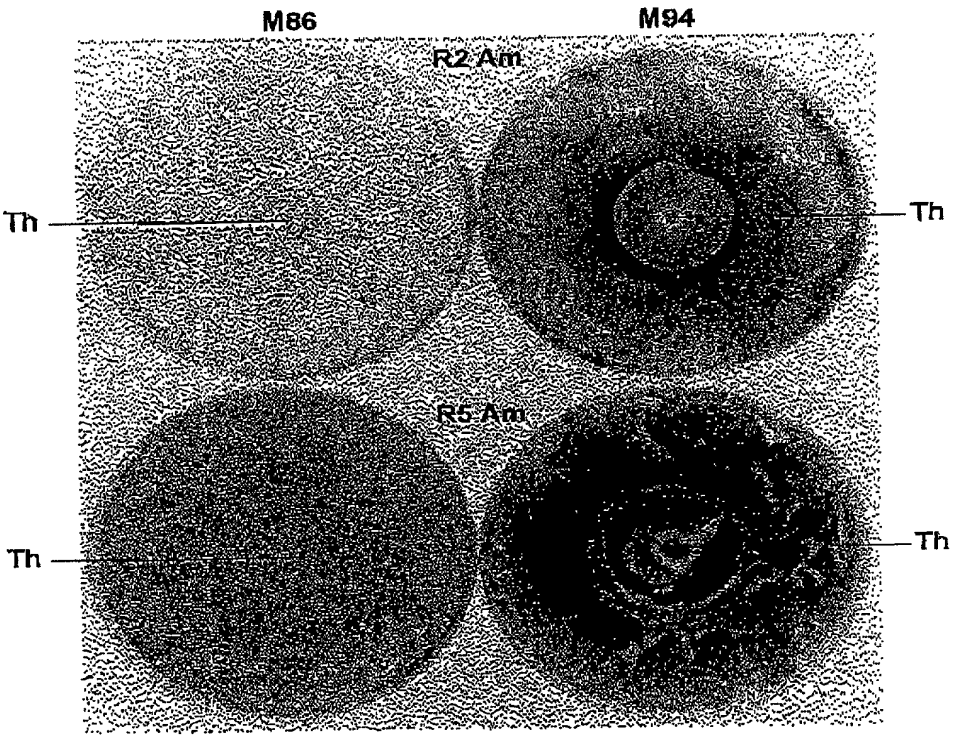


Fig. 8B

Fig. 9



Morphological and physiological differentiation of M86 and M94 in the precense of Th.
Spores of M86 and M94 were spread in R2 or R5 media containing 10 μg ml^{-1} Am. A drop containing 1 μg of Th was spotted in the centre of each plate. The picture shows the results obtained after the incubation of the plate at 30 °C for 48 h.

Fig. 10

TATTCTAGA**CATATG**ACCGTTTTGGATGAGGCGCCGGGCGAGCCGACGGACGCGCGCGGGCGGGTG
GCCGAGCTGCACGGGATCCGTGCAGCGGCGCTCGCCGGGCCGAGTGAGAAGGCGACGGCGGCGCAG
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AGCGCGCTCGCCGGGTACGGCGGCATCTTCCAGCGCAACACCAAGGCGTCCGGCGTCATCCCGCAG
ATCAGCGTGATGCTCGGCCCCTGCGCGGGCGGCGCGGCCTACAGCCCCGCCCTCACCGACTTCGTC
TTCATGGTCCGCGACACCTCGCAGATGTTCATCACGGGCCCGGACGTCGTCAAGGCGGTCACCGGC
GAGGAGATCACGCAGAACGGTCTGGGCGGCGCCGACGTGCACGCCGAGACGTCCGGCGTGTGCCAC
TTCGCCTACGACGACGAGGAGACCTGCCTCGCCGAGGTCCGCTACCTCCTCTCCCTCCTCCCGCAG
AACAACCGGGAGAACCCGCCCCGCGCCGAGTCCTCCGACCCCGTGGACCGCCGCTCGGACACCCTC
CTCGACCTGGTCCCGGCGGACGGCAACCGCCCGTACGACATGACCAAGGTCATCGAGGAACTCGTC
GACGAGGGCGAGTACCTGGAGGTCCACGAGCGTTG**TCTAGA**GGT

Fig. 11

A. AccA1

VRKVLIANRGEIAVRVARACRDAGIASVAVYADPDRDALHVRAADEAFALGGDTPATSYLDIAKVL
KAARESGADAIHPGYGFLSENAEFAQAVLDAGLIWIGPPPHAIRDRGEKVAARHIAQRAGAPLVAG
TPDPVSGADEVVAFAKEHGLPIAIKAAFGGGGRGLKVARTLEEVPELYDSAVREAVAAFGRGECFV
ERYLDKPRHVETQCLADTHGNVVVVSTRDCSLQRRHQKLVEEAPAPFLSEAQTEQLYSSSKAILKE
AGYGGAGTVEFLVGMDGTIFFLEVNTRLQVEHPVTEEVAGIDLVREMFRIADGEELGYDDPALRGH
SFEFRINGEDPGRGFLPAPGTVTLFDAPTGPGVRLDAGVESGSVIGPAWDSLLAKLIVTGRTRAEA
LQRAARALDEFTVEGMATAIPFHRTVVRDPAFAPELTGSTDPFTVHTRWIETEFVNEIKPFTTPAD
TETDEESGRETVVVEVGGKRLEVSLPSSLGMSLARTGLAAGARPKRRAAKKSGPAASGDTLASPMQ
GTIVKIAVEEGQEVQEGDLIVVLEAMKMEQPLNAHRSGTIKGLTAEVGASLTSGAAICEIKD

A. AccA2

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TPDPVSGADEVVAFAKEHGLPIAIKAAFGGGGRGLKVARTLEEVPELYDSAVREAVAAFGRGECFV
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TETDEESGRETVVVEVGGKRLEVSLPSSLGMSLARTGLAAGARPKRRAAKKSGPAASGDTLASPMQ
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Fig. 11 (cont)

B. *accA1*

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Fig. 11 (cont)

B. *accA2*

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Fig. 12

A. AccB

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B. *accB*

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CTGCGCCGGCACCGGGCGACCGGGTTCGGCCTGGAGGCCAAGAAGCCGTACACCGACGGTGTCATC
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TACATCGTCATGGACAGCCAGTCCATCGGCGCCGACCTCACCTACGCCTGGCCGACCAACGAGATC
GCCGTCATGGGCGCGGAAGGTGCCGCGAACGTCATCTTCCGCCGGCAGATCGCCGACGCCGAGGAC
CCCGAGGCCATGCGGGCGCGCATGGTCAAGGAGTACAAGTCCGAGCTGATGCACCCCTACTACGCG
GCCGAACGCGGTCTGGTCGACGACGTCATCGACCCCGCCGAAACCCGCGAGGTGCTGATCACGTCC
CTGGCGATGCTCCACACCAAGCACGCCGACCTGCCCTCCCGCAAGCACGGCAACCCGCCGCAGTGA

Fig. 13

A. AccE

MSPADIRVEKGHAEPEEVAAITALLLARAAARPAEIAPTHGGGRARAGWRRLEREPGFRAPHSWR

B. *accE*

ATGTCCCCTGCCGACATCCGCGTCGAGAAGGGCCACGCCGAGCCCGAGGAAGTCGCCGCC
ATCACGGCCCTCCTCCTGGCCCGCGCCGCCGCCCGCCCCGCCGAGATCGCGCCGACCCAC
GGCGGCGGCCGCGCCCGCGCCGGCTGGCGCCGCCTGGAACGCGAGCCGGGCTTCCGCGCC
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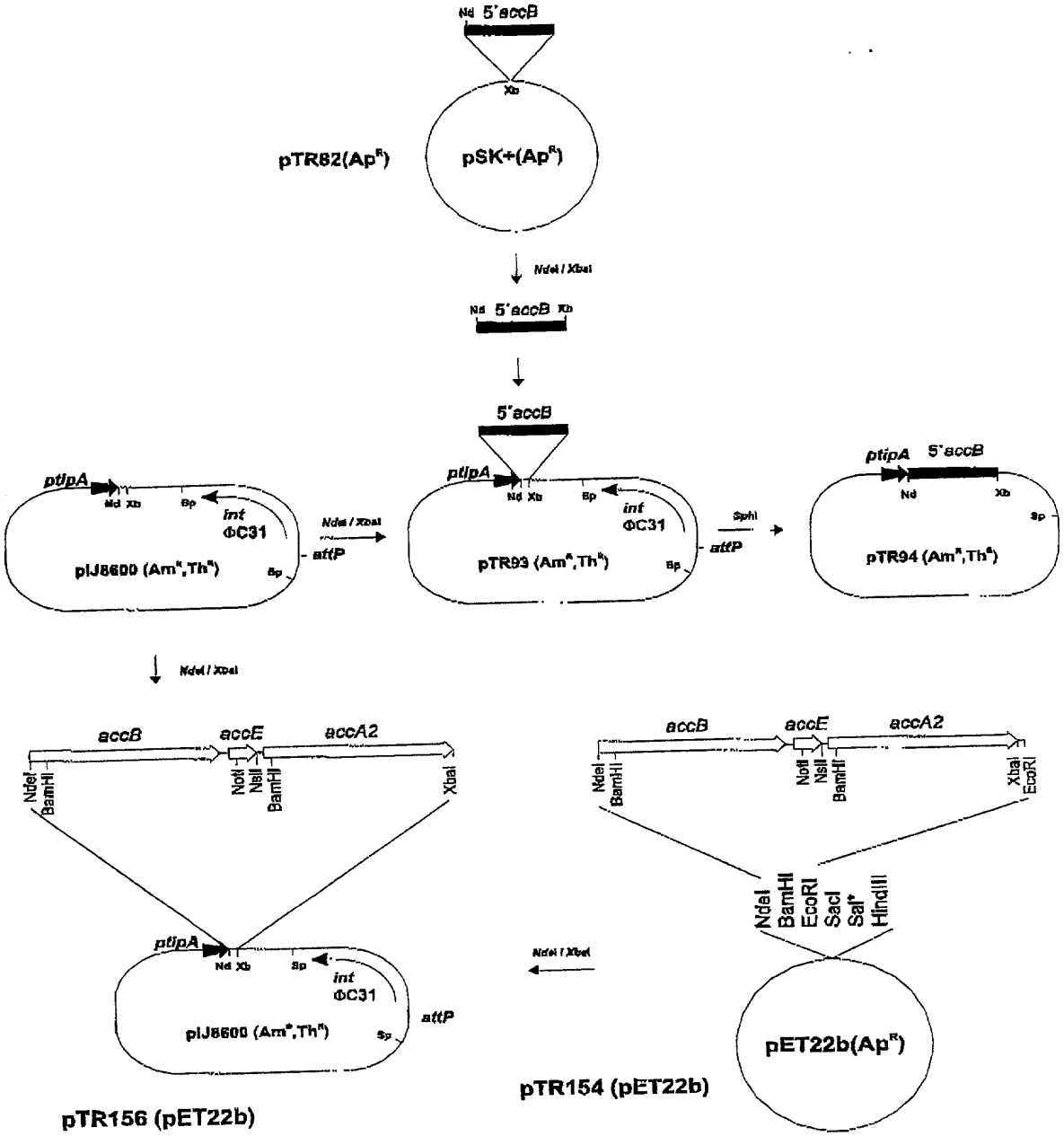
Fig. 14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pSK+(Ap^R)
5'accB
NdeI / XbaI
ptipA
int
ΦC31
attP
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pTR93 (Am^R,Th^R)
SphI
pTR94 (Am^R,Th^R)
accB
accE
accA2
NdeI
BamHI
NotI
NsiI
XbaI
pTR156 (pET22b)
pTR154 (pET22b)
EcoRI
SacI
SalI
HindIII
pET22b(Ap^R)